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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/693,197	10/24/2003	Mark T. Devlin	EI-7608	2333
34769	7590	02/27/2006	EXAMINER	
DENNIS H. RAINEAR CHIEF PATENT COUNSEL, ETHYL CORPORATION 330 SOUTH FOURTH STREET RICHMOND, VA 23219			SANDERS, KRIELLION ANTIONETTE	
			ART UNIT	PAPER NUMBER
			1714	

DATE MAILED: 02/27/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/693,197

Applicant(s)

DEVLIN ET AL.

Examiner

Kriellion A. Sanders

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1714

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-31 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-31 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 10/03, 4/05.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wallace et al, US Patent No. 5492638 in view of Srinivasan et al, US Patent No. 5358650.

Wallace et al discloses an oil composition which is used to improve the gear shift performance in a synchromesh transmission. The oil composition comprises:

Mineral or synthetic ester oil

Ashless dispersant

Sulphur containing anti-wear or extreme pressure agent

Phosphorus and nitrogen containing anti-wear or extreme pressure agent

Overbased alkali or alkaline based carboxylate, sulphonate, or sulfurized phenate

See claims 1-3.

- ◆ The mineral or synthetic ester oil corresponds to applicant's component e.
- ◆ The ashless dispersant corresponds to applicant's component d.
- ◆ The sulphur containing anti-wear or extreme pressure agent corresponds to applicant's component a.
- ◆ The phosphorus and nitrogen containing anti-wear or extreme pressure agent corresponds to applicant's component b.

- ♦ The overbased alkali or alkaline based carboxylate, sulphonate, or sulfurized phenate. The patent does not teach applicant's friction modifying compound, d.

Srinivasan et al also discloses oil compositions useful for lubricating gears. The compositions include among other things, a sulfur containing antiwear or extreme pressure agent, a phosphorus containing antiwear or extreme pressure agent, and an ashless dispersant. The patent documents these components to be conventional additives for lubricating compositions. See the abstract and claim 1.

Walsh et al discloses lubricants that contain sulfurized components of a mixture of a terpene and a polyolefin. These reactants may contain amine and/or amide groups. See col. 3, lines 1-15. Other conventional additives such as soaps, dispersants, extreme pressure agents and anti-wear agents are also included in the compositions. See col. 15, line 3 through col. 16, line 58.

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to include the sulfurized components of Walsh in the conventional lubricant compositions of Wallace et al with the expectation of achieving improved antioxidant, anti-wear and extreme pressure properties. The ordinary practitioner of this art would have looked to Wallace et al and Walsh to determine optimal ratios of additives. See Wallace et al at col. 5, line 64 through col. 6, line 40. The weight percentages given do not include diluents and take into account that some components have dual functions and should be adjusted accordingly. The resulting compositions would necessarily result in the base oil having a viscosity of SAE 50W to SAE 250, because the components are essentially the same as applicant's.

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Vinci US Patent No. 6573223, Hoke US Patent No. 4209408, WO 00/01790 and Walters et al, US Patent No. 5254272 also disclose lubricating systems and are all seen to provide cumulative teachings.

Prior art cited on form 1449 must include a month and year of publication to be fully considered.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kriellion A. Sanders whose telephone number is 571-272-1122. The examiner can normally be reached on Monday through Thursday 6:30-7:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on 571-272-1119. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Kriellion A. Sanders  
Primary Examiner  
Art Unit 1714

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